

SEQUENCE LISTING

(1) GENERAL INFORMATION

- (i) APPLICANT: Rath, Matthias
- (ii) TITLE OF INVENTION: METHOD OF PRODUCING  
VACCINES FROM PRTOEIN SIGNAL OLIGOPEPTIDES
- (iii) NUMBER OF SEQUENCES: 360
- (iv) CORRESPONDENCE ADDRESS:  
(A) ADDRESSEE: INHOUSE IP MANAGEMENT  
(B) STREET: 280 Colorado Avenue  
(C) CITY: Palo Alto  
(D) STATE: California  
(E) COUNTRY: USA  
(F) ZIP: 94301
- (v) COMPUTER READABLE FORM:  
(A) MEDIUM TYPE: Floppy Disk, 3.50 inch,  
1.44MB Storage  
(B) COMPUTER: IBM PC COMPATIBLE  
(C) OPERATING SYSTEM: WINDOWS 95  
(D) SOFTWARE: MS WORD 6.0
- (vi) CURRENT APPLICATION DATA:  
(A) APPLICATION NUMBER: NOT AVAILABLE  
(B) FILING DATE: JANUARY 14, 1999  
(C) CLASSIFICATION: 435
- (viii) ATTORNEY/AGENT INFORMATION:  
(A) NAME: ALI KAMAREI  
(B) REGISTRATION NUMBER: 37000  
(C) REFERENCE/DOCKET NUMBER: 10262-1US
- (ix) TELECOMMUNICATION INFORMATION:  
(A) TELEPHONE: 650-322-7371  
(B) TELEFAX: 650-322-7389

(2) INFORMATION FOR SEQ ID NO: 1:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

10262-1US

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

Asp Val Tyr Ala Gln Glu Lys Gln Asp  
1 5

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Asp Val His Asn Gln Glu Lys Gln Asn  
1 5

(2) INFORMATION FOR SEQ ID NO: 3:

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 6  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

Glu Ile Arg Arg Glu Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 4:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

Glu Asp Glu Met Gly His Pro Glu Ile Gly Asp  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 5:

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 11  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5;

Glu Asp Glu Leu Gly His Pro Glu Lys Gly Asp  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

Ala Ser Leu Leu Ala Tyr Gly Met Pro Lys Glu  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 7:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

Glu Pro Arg Lys Gln Asp Ala Asp  
1 5

(2) INFORMATION FOR SEQ ID NO: 8:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

Glu Pro Arg Lys Gln Asp Ala Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 9:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

Asn Lys Thr Val Glu Gln Leu Gly Gln Glu Glu  
1 5 10

00001976-0151001

(2) INFORMATION FOR SEQ ID NO: 10:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

Asp	Asp	Ile	Met	Asp	Ser	Ser	Leu	Thr	Arg	Arg
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 11:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

Asp	Asp	Ile	Met	Asp	Ser	Ser	Tyr	Thr	Arg	Arg
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

Asp	Asp	Met	Met	Asp	Lys	Ser	Ile	Thr	Arg	Arg
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 13:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

Lys	Leu	Tyr	Cys	Arg	Glu	Gln	Pro	Tyr	Tyr
1				5					10

00001976-061504

(2) INFORMATION FOR SEQ ID NO: 14:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

Lys	Ser	His	Phe	Arg	Asn	Glu	Lys	Tyr	Tyr
1				5					10

(2) INFORMATION FOR SEQ ID NO: 15:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:

Arg	Phe	Thr	Glu	Lys	Arg	Tyr	Lys
1				5			

(2) INFORMATION FOR SEQ ID NO: 16:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:

Arg	Tyr	Thr	Glu	Lys	Arg	Tyr	Lys
1				5			

(2) INFORMATION FOR SEQ ID NO: 17:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:

Lys	Phe	Ser	Leu	Lys	Lys	His	Ser
1				5			

000101-0300

(2) INFORMATION FOR SEQ ID NO: 18:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

Lys	Val	Asp	Leu	Ser	Lys	Phe	Ser	Leu	Lys	Lys
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 19:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

Lys	Lys	His	Ser	Phe	Ile	Val	Thr	Phe	Lys	Thr
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 20:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

Asp	Gly	Glu	Lys	Glu	His	Ala	Asn	Ala	Lys	Lys
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 21:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:

Asp	Gly	Glu	Lys	Glu	His	Ala	Asn	Ala	Leu	Lys
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 22:

00001976-061501

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 11  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:

Thr Asp Glu Lys Asp Leu Lys Gln Ala Arg Asp  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 23:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:

Lys Ile Gly Thr Asp Ile Gln Asp Asn Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 24:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 24:

Lys Val Gly Thr Asp Ile Gln Asp Asn Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 25:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 25:

Gln Arg Ala Thr Pro Glu Gln Tyr  
1 5

(2) INFORMATION FOR SEQ ID NO: 26:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 8

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Leu    Arg    Ala    Thr    Pro    Gln    Gln    Arg  
       1                          5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Glu    Leu    Ala    Ser    Ala    Glu    Gln    Arg  
1                          5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Lys    Glu    Asn    Tyr    Gly    Gln    Lys    Glu    Ala    Glu    Lys  
1                      5                      10

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Glu   Glu   Asn   Tyr   Gly   Gln   Lys   Asp   Pro   Glu   Lys  
1                :   5                10

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 9  
(B) TYPE: amino acid



(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 30:

Asp Glu Asn Tyr Gly Lys Lys Asp Ser  
1 5

(2) INFORMATION FOR SEQ ID NO: 31:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 31:

Arg Val Lys Ala Leu Tyr Glu Glu Leu  
1 5

(2) INFORMATION FOR SEQ ID NO: 32:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 32:

Lys Cys Lys Lys Ile Phe Asn Asp Leu  
1 5

(2) INFORMATION FOR SEQ ID NO: 33:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 33:

Lys Glu Ala Glu Lys Val Ala Arg Val Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 34:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

00001075-051504

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 34:

Lys 1    Asp    Ser    Val    Ala 5    Glu    Ala    Lys    Cys    Lys 10

(2) INFORMATION FOR SEQ ID NO: 35:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 35:

Lys	Asp	Pro	Glu	Lys	Val	Ala	Arg
1				5			

(2) INFORMATION FOR SEQ ID NO: 36:

### (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 36:

Gln Tyr Glu Glu Asp Ser Tyr Ser His  
1 5

(2) INFORMATION FOR SEQ ID NO: 37:

### (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: "SEQ ID NO: 37:

Lys Tyr Glu Glu Asp Ser Tyr Asn Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 38:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 38:





5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Glu Val Leu Glu Glu Glu Asp Arg Lys  
1 5 10

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Lys Gly Val Ser Ser Ser Thr Arg Lys  
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Ser Val Leu Glu Glu Glu Glu Asp Asn Lys  
1 5 10

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Asp	Glu	Asn	Val	Ser	Lys	Arg	Ile	Glu	Pro
1				5					10

(2) INFORMATION FOR SEQ ID NO: 51:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 51:

Asp Asp Met Met Pro Lys Arg Val Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 52:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 52:

Asp Pro Thr Met Pro Leu Trp Glu Phe  
1 5

(2) INFORMATION FOR SEQ ID NO: 53:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 53:

Lys Lys Val Pro Asp Asn Cys Cys Arg Arg Glu  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 54:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 54:

Lys Lys Ala Pro Asp Asn Cys Cys Arg Arg Glu  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 55:

000195-04100

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 55:

(2) INFORMATION FOR SEQ ID NO: 56:

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(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8;
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 56:

Gln Lys Cys Asp Ser Val Glu Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 57:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 57:

Glu Lys Leu Ser Ser Val Glu Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 58:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 58:

His Val Ser Thr Thr Glu Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 59:

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 7

(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 59:

Glu Thr Leu Ile Ser Asp Gln  
1 5

(2) INFORMATION FOR SEQ ID NO: 60:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 60:

Glu Glu Thr Gly Ile Asn Arg Glu Arg Lys Val Glu  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 61:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 61:

Glu Glu Pro Gly Val Ser Gln Asp Arg Lys Val Glu  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 62:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 62:

Glu Ala Ser Ser Lys Glu Glu Thr Glu Ala  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 63:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single

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(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 63:

Thr	Asp	Pro	Val	Thr	Ala	Ser	Pro	Arg	Asn
1				5					10

(2) INFORMATION FOR SEQ ID NO: 64:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 15  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 64:

Glu	Pro	Glu	Ile	Glu	Leu	Pro	Arg	Glu	Pro	Arg	Pro
1				5					10		
Asn	Glu	Glu									
		15									

(2) INFORMATION FOR SEQ ID NO: 65:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 15  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 65:

Glu	Leu	Glu	Ile	Glu	Leu	Pro	Ser	Glu	Pro	Arg	Pro
1				5					10		
Asn	Glu	Glu									
		15									

(2) INFORMATION FOR SEQ ID NO: 66:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 15  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 66:

Asn	Thr	Met	Phe	Asp	Leu	Pro	Glu	Glu	Pro	Arg	Pro
1				5					10		
Leu	Asp	Glu									
		15									

(2) INFORMATION FOR SEQ ID NO: 67:

09221975-064504

### (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 15  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(2) INFORMATION FOR SEQ ID NO: 68:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 68:

(2) INFORMATION FOR SEQ ID NO: 69:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 69:

(2) INFORMATION FOR SEQ ID NO: 70:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 70:

(2) INFORMATION FOR SEQ ID NO: 71:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 71:

(2) INFORMATION FOR SEQ ID NO: 72:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 72:

Pro	Arg	Glu	Gly	Val	Ala	Ile	Arg	Arg	Gln	Met	Leu
1				5					10		
Ser	Asp	Lys									
		15									

(2) INFORMATION FOR SEQ ID NO: 73:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 73:

[illegible]

(2) INFORMATION FOR SEQ ID NO: 74:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 74:

Pro 1	Phe	Arg	Ala	Val 5	Glu	Leu	Arg	Arg	Leu 10	Asp	Leu
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[illegible]

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Leu 1	Gln	Tyr	Leu	Pro 5	Tyr	Arg	Asp	Tyr	Asn 10
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(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Ile Glu Arg Ile Pro Tyr Lys Asp Tyr Asp  
1 5 10

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Leu	Gln	Ser	Leu	Pro	Tyr	Lys	Asn	Tyr	Asn
1				5					10

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Leu 1	Glu	Lys	Leu 5	Pro 5	Tyr	Ala	Ser	Tyr	Asp 10
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(2) INFORMATION FOR SEQ ID NO: 79:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 79:

Cys	Leu	Asp	Glu	Lys	Glu	Phe	Gln
1				5			

(2) INFORMATION FOR SEQ ID NO: 80:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 80:

Cys	Leu	Asp	Gly	Lys	Glu	Tyr	Gln
1				5			

(2) INFORMATION FOR SEQ ID NO: 81:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 81:

Leu	Leu	Asn	Asn	Lys	Glu	Tyr	Gln
1				5			

(2) INFORMATION FOR SEQ ID NO: 82:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 82:

Leu	Leu	Asp	Gly	Gln	Glu	Phe	Gln
1				5			

(2) INFORMATION FOR SEQ ID NO: 83:

- (i) SEQUENCE CHARACTERISTICS

09081976-061501

[illegible]

Leu	Leu	Asp	Gly	Arg	Ser	His	Tyr
1				5			

(A) LENGTH: 12  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Arg Leu Pro Arg Ala Cys Asp Ser Ala Glu Val Lys  
1 5 10

(A) LENGTH: 12  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Arg	Leu	Pro	Thr	Ala	Cys	Asp	Ala	Ala	Glu	Val	Lys
1				5					10		

(A) LENGTH: 12  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Arg    Leu    Pro    Ser    Ala    Gln    Glu    Ala    Gly    Ala    Ile    Lys  
1                      5                      10

(A) LENGTH: 10  
(B) TYPE: amino acid

(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 87:

Glu	Lys	Ala	Leu	Ser	Lys	Leu	His	Glu	Tyr
1				5					10

(2) INFORMATION FOR SEQ ID NO: 88:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 88:

Glu	Lys	Ala	Leu	Val	Lys	Leu	Gln	Glu	Phe
1				5					10

(2) INFORMATION FOR SEQ ID NO: 89:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 89:

Glu	Gln	Ala	Leu	Ala	Arg	Leu	Gln	Glu	Glu
1				5					10

(2) INFORMATION FOR SEQ ID NO: 90:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 90:

Glu	Gln	Ala	Leu	His	Ala	Leu	Gln	Thr	Met
1				5					10

(2) INFORMATION FOR SEQ ID NO: 91:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

00901976 064504

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 91:

Cys Lys Asp Asn Pro Gly Glu Asn Ala Arg  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 92:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 92:

Ser Thr Glu Thr Pro Gly Lys Asn Ala Cys  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 93:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 93:

Asn Ile His Gly Ser Gly Leu Asn Ala Ser  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 94:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 94:

His Asn Arg Ser Lys Ile Asn Leu Gln Asp  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 95:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 95:

000409-0000



His Asn Arg Ser Ala Leu Asn Ile Asp Glu  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 96:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 96:

Asp Tyr Ser Lys Tyr Leu Asp Ser  
1 5

(2) INFORMATION FOR SEQ ID NO: 97:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 97:

Asp Ser Arg Arg Ala Gln Asp  
1 5

(2) INFORMATION FOR SEQ ID NO: 98:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 98:

Asp Tyr Ser Lys Tyr Leu Asp Ser Arg Arg Ala Gln  
1 5 10

Asp

(2) INFORMATION FOR SEQ ID NO: 99:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 99:

0581975-054504



(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 103:

Asp Tyr Ser Lys Tyr Leu Asp Ser  
1 5

(2) INFORMATION FOR SEQ ID NO: 104:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 104:

Asp Ser Arg Arg Ala Gln Asp  
1 5

(2) INFORMATION FOR SEQ ID NO: 105:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 105:

Asp Tyr Ser Lys Tyr Leu Asp Ser Arg Arg Ala Gln  
1 5 10  
Asp

(2) INFORMATION FOR SEQ ID NO: 106:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 106:

Asp Val Ala Ser Leu Thr Asp Tyr Leu Lys Ser Lys  
1 5 10  
Arg

(2) INFORMATION FOR SEQ ID NO: 107:

(i) SEQUENCE CHARACTERISTICS

090496-0150  
FBI/DOJ

(A) LENGTH: 13  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 107:

Asp Tyr Ser Lys Tyr Met Asp Asn Arg Arg Ala Lys  
1 5 10  
Asp

(2) INFORMATION FOR SEQ ID NO: 108:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 108:

Asp Tyr Ser Lys Tyr Leu Asp Asn Arg Arg Ala Lys  
1 5 10  
Asp

(2) INFORMATION FOR SEQ ID NO: 109:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 109:

Asp Tyr Ser Lys Tyr Leu Asp Ser Arg Arg Ala Gln  
1 5 10  
Gln

(2) INFORMATION FOR SEQ ID NO: 110:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 110:

Asp Tyr Ser Lys Phe Leu Asp Thr Arg Arg Ala Gln

000000-000000



[illegible][illegible]

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Asp   Phe   Asn   Lys   Ala   Leu   Asp   Ile   Lys   Ala   Ala   Gln  
1                  5                                10  
Glu

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Asp    Pro    Leu    Ser    Asp    Pro    Asp    Gln    Met  
1                          5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Asn   Glu   Asp   Lys   Arg   His   Ser   Gln  
1                      5

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 15  
(B) TYPE: amino acid

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Lys	Asp	Glu	Pro	Arg	Glu	Leu	Ser	Asn	Met	Lys	Arg
1				5					10		
His	Ser	Glu									
		15									

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Arg	Glu	Leu	Ser	Asn	Met	Lys	Arg	His
1				5				

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

[illegible]

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Glu Asp Pro Asp Gln Ile Asn Glu Asp Lys Arg His  
1 5 10

### (i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 122:

Asp	Asp	Pro	Asp	Gln	Met	Asn	Glu	Asp	Lys	Arg	His
1				5					10		
Ser	Gln										

(2) INFORMATION FOR SEQ ID NO: 123:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 123:

Gly	Asp	Pro	Asp	Gln	Ile	Asn	Glu	Asp	Lys	Arg	His
1				5					10		
Ser	Gln										

(2) INFORMATION FOR SEQ ID NO: 124:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 124:

Asp	Glu	Ser	Arg	Gln	Leu	Asn	Glu	Val	Lys	Arg	His
1				5					10		
Ser	Gln										

(2) INFORMATION FOR SEQ ID NO: 125:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 125:

Met	Asn	Thr	Lys	Arg	Asn	Arg	Asn	Asn
1				5				

(2) INFORMATION FOR SEQ ID NO: 126:

00001976-061501



### (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(2) INFORMATION FOR SEQ ID NO: 127:

### (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 20  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEO ID NO: 127:

Met	Asn	Thr	Lys	Arg	Asn	Arg	Asn	Arg	Asn	Asn	Lys
1				5					10		
Arg	His	Asp	Glu	Phe	Glu	Arg	His				
		15					20				

(2) INFORMATION FOR SEO ID NO: 128:

### (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 128:

Asn Lys Arg Ser Gly Val Ala Glu Lys Arg  
1 5 10

(2) INFORMATION FOR SEO ID NO: 129:

### (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 11  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEO ID NO: 129:

Val	Lys	Arg	Asn	Arg	Asn	Asn	Ile	Ala	Lys	Arg
1			5						10	

(2) INFORMATION FOR SEQ ID NO: 130:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 130:

Lys Asn Thr Lys Arg Asn Arg Asn Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 131:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 131:

Thr Lys Arg Asn Gly Xaa Xaa Gly Gln Glu Asp Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 132:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 132:

Gln Glu Asp Lys Glu Asn Asp Lys Phe  
1 5

(2) INFORMATION FOR SEQ ID NO: 133:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 133:

Lys Arg His Ser Glu Phe Glu Arg His Ala Glu  
1 5  
10

(2) INFORMATION FOR SEQ ID NO: 134:

00001076-064004

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 134:

Gln Asp Thr Glu Glu Lys Ser Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 135:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 135:

Gln Asp Thr Glu Glu Lys Pro Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 136:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 136:

Gln Asp Thr Glu Glu Asn Ala Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 137:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 137:

Asp Gln Asp Pro Asp Arg Asn Ser Met  
1 5

(2) INFORMATION FOR SEQ ID NO: 138:

- (i) SEQUENCE CHARACTERISTICS

00004976 061504  
105150 967880

(A) LENGTH: 11  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 138:

Lys	Gly	Arg	Gly	Arg	Arg	Asp	Phe	Pro	Glu	Glu
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 139:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 139:

Asp	Arg	Leu	Lys	Ala	Gln	Val	Arg	Arg	Glu
1				5					10

(2) INFORMATION FOR SEQ ID NO: 140:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 140:

Ala	Lys	Leu	Lys	Ser	Gly	Lys	Val
1				5			

(2) INFORMATION FOR SEQ ID NO: 141:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 141:

Lys	Ser	Gly	Gln	Pro	Lys	Pro	Glu
1				5			

(2) INFORMATION FOR SEQ ID NO: 142:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8  
(B) TYPE: amino acid

000106-061501

DECEMBER 1960

Lys   Gln   Gly   Gln   Asp   Arg   Arg   Glu  
1                      5

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Ala Asp Pro Ser Lys Lys Gln  
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Arg Thr Asp Leu Ser Lys Lys Gln  
1 5

```
(i) SEQUENCE CHARACTERISTICS
    (A) LENGTH: 7
    (B) TYPE: amino acid
    (C) STRANDEDNESS: single
    (D) TOPOLOGY: linear
```

Ala    Asp    Leu    Ser    Lys    Lys    Gln  
1                      5

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
```



(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 150:

Trp Ala Glu Glu Glu Glu Ala  
1 5

(2) INFORMATION FOR SEQ ID NO: 151:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 151:

Pro Met Glu Glu Glu Glu Glu Ala  
1 5

(2) INFORMATION FOR SEQ ID NO: 152:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 152:

Asp Phe Gly Arg Arg Ser Ala Glu Asp Glu Asn  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 153:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 153:

Met Asp Phe Gly Arg Arg Ser  
1 5

(2) INFORMATION FOR SEQ ID NO: 154:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 154:

0901076-06150

Arg Arg Ser Ala Glu Asp Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 155:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 155:

Arg Arg Ser Ala Glu Asp Gly Asp Gln His Pro  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 156:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 156:

Arg Asp Leu Glu Leu Pro Trp Leu Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 157:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 157:

Arg Gly Lys Glu Pro His Glu Leu Asp Arg  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 158:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 158:

Arg Gly Gln Glu Pro Leu Arg  
1 5

00001075-051501







- (A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 167:

Gly Trp Leu Pro Gly Gly Lys Arg Asp  
1 5

(2) INFORMATION FOR SEQ ID NO: 168:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 168:

His Gly Trp Tyr Pro Gly Gly Lys Arg Asp  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 169:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 169:

Gln His Tyr Ser Leu Glu Trp Lys Pro Gly  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 170:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 170:

Arg Pro Gly Gly Lys Arg Asp Ala Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 171:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10  
(B) TYPE: amino acid

0001975-0000



(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 175:

Trp Asn Lys Asp Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 176:

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 6  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 176:

Glu Val Glu Arg Ala Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 177:

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 177:

His Arg Arg Leu Phe His Lys Ser Asp  
1 5

(2) INFORMATION FOR SEQ ID NO: 178:

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 7  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 178:

Lys Thr Pro Phe Pro Asp Ser  
1 5

(2) INFORMATION FOR SEQ ID NO: 179:

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 6  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

0001076-061800

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 179:

Tyr Glu Lys Glu Val Pro  
1 5

(2) INFORMATION FOR SEQ ID NO: 180:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 180:

Glu Val Asp Leu Arg Lys Pro  
1 5

(2) INFORMATION FOR SEQ ID NO: 181:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 181:

Lys Val Lys Ile Glu Val Asn Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 182:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 182:

Ala Arg Met Ala Pro Glu Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 183:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 6
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 183:

000106-0501



1

5

(2) INFORMATION FOR SEQ ID NO: 188:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 188:

Lys Met Pro Phe Pro Glu Ser  
1 5

(2) INFORMATION FOR SEQ ID NO: 189:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 189:

Lys Thr Pro Phe Leu Glu Ala  
1 5

(2) INFORMATION FOR SEQ ID NO: 190:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 190:

His His Arg Leu Phe His Lys Ser Asp  
1 5

(2) INFORMATION FOR SEQ ID NO: 191:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 191:

His Gln Arg Leu Phe His Lys Ser Asp  
1 5

00001076-064501







- (i) SEQUENCE CHARACTERISTICS
  - (A) LENGTH: 9
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 200:
 

Lys	Leu	Glu	Glu	His	Tyr	Glu	Leu	Arg
1				5				
- (2) INFORMATION FOR SEQ ID NO: 201:
  - (i) SEQUENCE CHARACTERISTICS
    - (A) LENGTH: 9
    - (B) TYPE: amino acid
    - (C) STRANDEDNESS: single
    - (D) TOPOLOGY: linear
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 201:
 

Lys	Leu	Ala	Gln	Ser	Tyr	Glu	Leu	Lys
1				5				
  - (2) INFORMATION FOR SEQ ID NO: 202:
    - (i) SEQUENCE CHARACTERISTICS
      - (A) LENGTH: 9
      - (B) TYPE: amino acid
      - (C) STRANDEDNESS: single
      - (D) TOPOLOGY: linear
    - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 202:
 

Glu	Arg	Asn	Asp	Leu	Phe	Leu	Ser	Glu
1				5				
    - (2) INFORMATION FOR SEQ ID NO: 203:
      - (i) SEQUENCE CHARACTERISTICS
        - (A) LENGTH: 8
        - (B) TYPE: amino acid
        - (C) STRANDEDNESS: single
        - (D) TOPOLOGY: linear
      - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 203:
 

Asp	Val	Asn	Glu	Glu	Gly	Thr	Glu
1				5			
      - (2) INFORMATION FOR SEQ ID NO: 204:
        - (i) SEQUENCE CHARACTERISTICS
          - (A) LENGTH: 8

(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 204:

Asp Val Thr Glu Glu Gly Thr Val  
1 5

(2) INFORMATION FOR SEQ ID NO: 205:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 205:

Arg Gly Ser Thr Glu Asp Glu Gln  
1 5

(2) INFORMATION FOR SEQ ID NO: 206:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 206:

Gly Gly Asn Thr Glu Gln Gln  
1 5

(2) INFORMATION FOR SEQ ID NO: 207:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 207:

Glu Lys Ser Ala Ser Phe Arg Glu Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 208:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single

000000-000000-000000

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 208:

Glu Lys Ser Ala Arg Phe Lys Glu Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 209:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 6  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 209:

Glu Glu Ala Arg Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO: 210:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 6  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 210:

Glu Glu Ala Arg Glu Lys  
1 5

(2) INFORMATION FOR SEQ ID NO: 211:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 211:

Lys Thr Gln Thr Lys Gly Lys  
1 5

(2) INFORMATION FOR SEQ ID NO: 212:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

099193-061360

# 100 Years of Progress

(2) INFORMATION FOR SEQ ID NO: 213:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 213:

(2) INFORMATION FOR SEQ ID NO: 214:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

(2) INFORMATION FOR SEQ ID NO: 215:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 215:

(2) INFORMATION FOR SEQ ID NO: 216:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 216:

100-443886-100

Glu   Glu   Ala   Glu   Glu   Pro   Tyr   Glu   Glu  
1                      5

(2) INFORMATION FOR SEQ ID NO: 221:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 221:

Ala	Asp	Val	Glu	Glu	Glu	Glu	Ala	Asp	Asp	Asp	Glu
1				5					10		
Asp	Val	Glu									
		15									

(2) INFORMATION FOR SEQ ID NO: 222:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 222:

Lys	Ala	Lys	Glu	Arg	Leu	Glu
1				5		

(2) INFORMATION FOR SEQ ID NO: 223:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 223:

Glu	Ala	Lys	His	Arg	Glu	Arg
1				5		

(2) INFORMATION FOR SEQ ID NO: 224:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 224:

Arg	Glu	Trp	Glu	Glu	Ala	Glu	Arg
1				5			

0981975-06450





- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 6  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 229:

Glu Asp Val Cys Gly Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 230:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 6  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 230:

Glu Asp Val Arg Gly Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 231:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 6  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 231:

Glu Asp Leu Arg Asn Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 232:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 232:

His Leu Arg Lys Leu Arg Lys Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 233:

- (i) SEQUENCE CHARACTERISTICS

00881976-061501

**SECRET**

His	Pro	Arg	Lys	Met	Lys	Arg	Arg
1				5			

(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

His 1	Leu	Arg	Lys	Met 5	Arg	Lys	Arg
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(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Arg Asp Arg Leu Asp Glu Val Lys Glu  
1 5

(A) LENGTH: 6  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Arg Ala Arg Met Glu Glu  
1 5

(A) LENGTH: 6  
(B) TYPE: amino acid

(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 237:

Arg Gly Arg Met Glu Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 238:

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 6  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 238:

Arg Gly Arg Leu Glu Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 239:

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 13  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 239:

Asp Tyr Thr Glu Val Gln Arg Arg Asn Gln Leu His  
1 5 10  
Asp

(2) INFORMATION FOR SEQ ID NO: 240:

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 240:

Lys Glu Leu Lys Asn Pro Thr Asn Pro Asp  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 241:

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 12

090197-05400  
FOI 90-9267860

**COLEMAN**

Glu Gly Glu Glu Gly Gly Asp Phe Asp Glu Ala Lys  
1 5 10

(A) LENGTH: 13  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

```

Asp   Glu   Ala   Lys   Leu   Ala   Glu   Ala   Arg   Glu   Met   Ile
 1           :       5           10
Arg           :

```

(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Asp Met Val Met Arg Lys Arg Arg Asn  
1 5

(A) LENGTH: 21  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Arg 1	Lys	Arg	Arg	Asn 5	Thr	Asn	Tyr	Thr	Gln 10	Val	Pro
Asn	Lys	Asp 15	Ala	Asp	Glu	Asp	Asp 20	Leu			

(2) INFORMATION FOR SEQ ID NO: 245:



(B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 249:

Arg Lys Arg Asn Lys Ala Arg  
 1 5

(2) INFORMATION FOR SEQ ID NO: 250:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 250:

Glu Asp Glu Ala Gly Asp Glu Asp Glu Leu  
 1 5 10

(2) INFORMATION FOR SEQ ID NO: 251:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 23  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 251:

Arg Lys Arg Asn Lys Ala Arg Tyr Ser Pro Leu His  
 1 5 10  
 Asn Glu Asp Glu Ala Gly Asp Glu Asp Glu Leu  
 15 20

(2) INFORMATION FOR SEQ ID NO: 252:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 252:

Lys Glu Glu Ala Glu Lys Lys Ala Ala Glu Gln Arg  
 1 5 10

(2) INFORMATION FOR SEQ ID NO: 253:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8

00001075-061501

(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 253:

His Ala Asp Arg Arg Leu Met Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 254:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 254:

Asp Val Glu Arg Gln Ser Thr Asp Ala Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 255:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 255:

Lys Ile Glu Gly Asp Leu Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO: 256:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 256:

Glu Leu Arg Pro Gln Leu Glu Glu Ala Asp  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 257:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single

00001076-051504



(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 257:

Asp Ser Gln Tyr Gln Glu Ala Arg Glu Ala Glu Glu  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 258:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 258:

Arg Leu Lys Lys Thr Glu Ala Glu Lys  
1 5

(2) INFORMATION FOR SEQ ID NO: 259:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 259:

Ala Lys Thr Lys Gln Lys Ala  
1 5

(2) INFORMATION FOR SEQ ID NO: 260:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 260:

Asp Leu Ala Arg Ser Ala Asp Lys Ser  
1 5

(2) INFORMATION FOR SEQ ID NO: 261:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

00881976-064504

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 261:

Lys Glu Pro Ile Glu Val Glu Pro Leu Pro Asn Asp  
1 5 10  
Arg

(2) INFORMATION FOR SEQ ID NO: 262:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 262:

Arg Val Gln Ser Arg Gly Val Glu Asp Gly Gly Arg  
1 5 10  
Ser Pro Lys  
15

(2) INFORMATION FOR SEQ ID NO: 263:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 263:

Glu Ser His Gln Val Glu Lys Arg Lys  
1 5

(2) INFORMATION FOR SEQ ID NO: 264:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 264:

Asn Pro Gln Met Asp Lys Arg Lys  
1 5

(2) INFORMATION FOR SEQ ID NO: 265:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

005750-9267850

# 2025

Asp	His	Arg	Val	Asp	Lys	Arg	Lys
1				5			

(2) INFORMATION FOR SEQ ID NO: 266:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 266:

Lys 1	Arg	Asn	Ala	Val 5	Glu	Val	Leu	Lys	Arg 10	Glu
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(2) INFORMATION FOR SEQ ID NO: 267:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 267:

Lys 1	Arg	Asn	Val	Ala 5	Glu	Asp	Pro	Asn	Arg 10	Glu
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----

(2) INFORMATION FOR SEQ ID NO: 268:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 268:

Arg 1 Arg Asn Ala Glu 5 Val Val Asp Val Glu 10

(2) INFORMATION FOR SEQ ID NO: 269:

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 269:

Leu Lys Asn Asp Gly Arg Gln Val Glu Lys Arg Arg  
1 5 10  
Asn

(2) INFORMATION FOR SEQ ID NO: 270:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 11

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 270:

Lys Asn Asp Gly Arg Gln Val Glu Lys Arg Arg  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 271:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 11

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 271:

Lys Asp Asp Trp Arg Lys Ile Pro Lys Gln Arg  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 272:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 272:

Lys Lys Val Glu Arg Gln Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 273:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 273:

0000197E-061504



1

5

(2) INFORMATION FOR SEQ ID NO: 278:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 278:

Glu Val Ala His Arg Asp Glu  
1 5

(2) INFORMATION FOR SEQ ID NO: 279:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 279:

Glu Val Ala Asp Arg Asp Glu Val Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 280:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 280:

Arg Tyr Asp Glu Tyr Lys Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 281:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 5
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 281:

Arg Ser Gly Glu Pro  
1 5

00001075-061501

2025-01-15

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Arg Asn Gly Asp Gln Gln Gly Ile His His  
1 5 10

(A) LENGTH: 6  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Ala Arg Gln Arg Arg Pro  
1 5

(A) LENGTH: 11  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Arg . Asp Asp Asn Asp Arg Asp Pro Ser Ala Lys  
1 5 10

(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Lys Val Ser Lys Arg Pro Asp Tyr Asp  
1 5

(2) INFORMATION FOR SEQ ID NO: 286:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 13  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 286:

Glu Ala Phe Glu Cys Phe Glu Ser Asp Pro Asn Ala  
1 5 10  
Lys

(2) INFORMATION FOR SEQ ID NO: 287:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 287:

Lys Cys Arg Lys Lys Tyr Glu Phe Cys Arg  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 288:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 13  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 288:

His Arg His Gln Arg Thr Pro Glu Asn Tyr Pro Asn  
1 5 10  
Asp

(2) INFORMATION FOR SEQ ID NO: 289:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 289:

Asp Pro Ser Ile Arg Trp Glu Tyr Cys

00001075 051501



1

5

(2) INFORMATION FOR SEQ ID NO: 290:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 290:

His	Gln	His	Lys	Arg	Thr	Pro	Glu	Asn	His	Pro	Asn
1				5					10		
Asp	Asp										

(2) INFORMATION FOR SEQ ID NO: 291:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 291:

Met	Asp	Pro	Ser	Val	Arg	Arg	Glu	Tyr	Cys
1				5					10

(2) INFORMATION FOR SEQ ID NO: 292:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 292:

Arg	Thr	Pro	Glu	Asn	Tyr	Pro	Asn	Gly
1				5				

(2) INFORMATION FOR SEQ ID NO: 293:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 293:

Leu	Glu	Ala	Pro	Ser	Lys	Gln	Ala
1				5			

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[illegible]

```

( A ) LENGTH: 11
( B ) TYPE: amino acid
( C ) STRANDEDNESS: single
( D ) TOPOLOGY: linear

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Leu 1	Glu	Ala	Phe	Leu 5	Gln	Glu	Pro	Thr	Glu 10	Glu
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----

(A) LENGTH: 9  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Gly His Leu Ala Gly Gly Thr Asp Arg  
1 5

(A) LENGTH: 11  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Glu Arg Arg Lys Asp Arg Gly Gly Arg Glu Asp  
1 5 10

(A) LENGTH: 11  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Glu Ser Arg Lys Asn Arg Gly Gly Arg Glu Glu  
1 5 10

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His 1	Glu	Arg	Glu	Glu 5	Glu	Leu	Arg	Lys	Arg 10	Leu	Arg
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----

(2) INFORMATION FOR SEQ ID NO: 302: ,

- (i) SEQUENCE CHARACTERISTICS  
 (A) LENGTH: 10  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 302:

Thr Glu Glu Glu Leu Arg Arg Arg Leu Arg  
 1 5 10

(2) INFORMATION FOR SEQ ID NO: 303:

- (i) SEQUENCE CHARACTERISTICS  
 (A) LENGTH: 10  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 303:

Asn Glu Glu Glu Leu Arg Arg Arg Leu Arg  
 1 5 10

(2) INFORMATION FOR SEQ ID NO: 304:

- (i) SEQUENCE CHARACTERISTICS  
 (A) LENGTH: 13  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 304:

Glu Arg Ala Asp Glu Glu Gly Leu Gln Gly Lys Leu  
 1 5 10  
 Arg

(2) INFORMATION FOR SEQ ID NO: 305:

- (i) SEQUENCE CHARACTERISTICS  
 (A) LENGTH: 11  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 305:

Asp Ser Asp Glu Glu Leu Leu Arg Thr Val Arg  
 1 5 10

(2) INFORMATION FOR SEQ ID NO: 306:

00001075-061501

**DO NOT WRITE IN THESE SPACES**

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 306:

(2) INFORMATION FOR SEQ ID NO: 307:

(A) LENGTH: 8  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 307:

(2) INFORMATION FOR SEQ ID NO: 308:

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 308:

(2) INFORMATION FOR SEQ ID NO: 309:

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 309:

(2) INFORMATION FOR SEQ ID NO: 310:

(i) SEQUENCE CHARACTERISTICS



(2) INFORMATION FOR SEQ ID NO: 314:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 314:

Asp	Arg	Val	Tyr	Ile	His	Pro	Phe	His	Leu	Leu	Tyr
1				5					10		
Tyr	Ser	Lys									
		15									

(2) INFORMATION FOR SEQ ID NO: 315:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 315:

Asp	Arg	Val	Tyr	Ile	His	Pro	Phe	His	Leu	Val	Ile
1				5					10		
His	Asn	Glu									
		15									

(2) INFORMATION FOR SEQ ID NO: 316:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 316:

Glu	Asn	Pro	Ser	Val	Glu	Thr	Leu	Pro	Glu	Ser	Thr
1				5					10		
Phe											

(2) INFORMATION FOR SEQ ID NO: 317:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 317:

000197-0510-0000





Asn Ile Gly Asp Thr Asn Pro Arg Val Gly Glu  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 322:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 322:

Glu Leu Glu Ala Asp Glu Arg Glu Pro Thr Glu  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 323:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 323:

Asp Gly Trp Arg Arg Met Pro  
1 5

(2) INFORMATION FOR SEQ ID NO: 324:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 6
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 324:

Asp Arg Arg Arg Met Pro  
1 5

(2) INFORMATION FOR SEQ ID NO: 325:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 325:

000197-06150

Lys Arg Ile Phe Leu Lys Arg Met Pro Ser Ile Arg  
 1 5 10  
 Glu

(2) INFORMATION FOR SEQ ID NO: 326:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 326:

Gly Arg Ile Leu Leu Lys Lys Met Pro Ser Val Arg  
 1 5 10  
 Glu

(2) INFORMATION FOR SEQ ID NO: 327:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 327:

Lys Arg Met Pro Ser Ile Arg Glu Ser Leu Lys Glu  
 1 5 10  
 Arg Gly

(2) INFORMATION FOR SEQ ID NO: 328:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 328:

Lys Lys Met Pro Ser Val Arg Glu Ile Leu Glu Glu  
 1 5 10  
 Arg Gly

(2) INFORMATION FOR SEQ ID NO: 329:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

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Arg   Glu   Ile   Leu   Glu   Glu   Arg   Gly  
1                      5

(2) INFORMATION FOR SEQ ID NO: 330:

### (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 330:

Arg 1	Leu	Gly	Pro	Glu 5	Trp	Ser	Gln	Pro	Met 10	Lys	Arg
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----

(2) INFORMATION FOR SEQ ID NO: 331:

### (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 331:

Arg 1	Ile	Ser	Ala	Glu 5	Trp	Gly	Glu	Phe	Ile 10	Lys	Lys
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----

(2) INFORMATION FOR SEQ ID NO: 332:

### (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi). SEQUENCE DESCRIPTION: SEQ ID NO: 332;

Arg 1	Ile	Ser	Ala	Glu 5	Trp	Gly	Glu	Phe	Ile 10	Lys	Lys
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----

(2) INFORMATION FOR SEQ ID NO: 333:

### (i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 333;



[illegible]

(2) INFORMATION FOR SEQ ID NO: 338:

(A) LENGTH: 14  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

[illegible]

(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Asp    Pro    Gln    His    Tyr    Glu    Gly    Asn    Phe    His  
1                         5                                  10

(A) LENGTH: 15  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Glu 1	Lys	Leu	Met	Glu 5	Ala	Leu	Gly	Ala	Lys 10	Lys	Arg
Leu	Phe	Asp 15									

(A) LENGTH: 15

[illegible]

Gln	Leu	Ile	Met	Gln	Ala	Leu	Gly	Val	Lys	Glu	Lys
1				5					10		
Arg	Ala	Asn									
		15									

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 15  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Lys	Leu	Ile	Met	Gln	Ala	Leu	Gly	Ala	Lys	Glu	Lys
1				5					10		
Arg	Ile	Glu									
		15									

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Asp 1	Tyr	Val	Phe	Gln 5	Glu	Ser	Tyr	Ser	Ser 10	Lys	Lys
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----

(i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 12  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

Asp Tyr Val Gln Lys Asn Pro Phe Arg Asn Asp Asp  
1 5 10

(2) INFORMATION FOR SEQ ID NO: 345:

- (i) SEQUENCE CHARACTERISTICS  
 (A) LENGTH: 11  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 345:

Asp Tyr Val Gln Tyr Pro Asn Arg Arg Asp Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO: 346:

- (i) SEQUENCE CHARACTERISTICS  
 (A) LENGTH: 13  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 346:

Arg Lys Phe Tyr Thr Glu Phe Asp Arg Arg Asn Asn  
 1 5 10  
 Arg

(2) INFORMATION FOR SEQ ID NO: 347:

- (i) SEQUENCE CHARACTERISTICS  
 (A) LENGTH: 13  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 347:

Arg Lys Phe Tyr Thr Glu Phe Asp Arg His Asn Asn  
 1 5 10  
 Arg

(2) INFORMATION FOR SEQ ID NO: 348:

- (i) SEQUENCE CHARACTERISTICS  
 (A) LENGTH: 13  
 (B) TYPE: amino acid  
 (C) STRANDEDNESS: single  
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 348:

Arg Lys Phe Tyr Thr Glu Phe Asp Arg His Asn Asn  
 1 5 10  
 Arg

00001975-05100

(2) INFORMATION FOR SEQ ID NO: 349:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 349:

Arg	Tyr	Leu	Glu	Leu	Arg	Glu	Ala	Ala	Asp	Tyr	Asp
1				5					10		

(2) INFORMATION FOR SEQ ID NO: 350:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 350:

Arg	Tyr	Leu	Glu	Val	Gln	Glu	Ala	Ala	Val	Tyr	Asp
1				5					10		

(2) INFORMATION FOR SEQ ID NO: 351:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 351:

Lys	Arg	Asp	Val	Ala	Gly	Glu	Gln	Pro	Tyr	Arg	Arg
1				5					10		

(2) INFORMATION FOR SEQ ID NO: 352:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 352:

Lys	Arg	Asn	Leu	Ala	Glu	Glu	Gln	Pro	Tyr	Arg	Arg
1				5					10		

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[illegible]

(A) LENGTH: 9

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 353:

Asp   His   Pro   Leu   Pro   Ser   Ala   Glu   Arg  
1                      5

(2) INFORMATION FOR SEQ ID NO: 354:

(A) LENGTH: 9

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 354:

Asp His Pro Leu Pro Thr Arg Glu Arg  
1 5

(2) INFORMATION FOR SEQ ID NO: 355:

(A) LENGTH: 8'

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 355:

Arg 1	Arg	Ser	Ile	Arg 5	Ser	Ser	Gln
----------	-----	-----	-----	----------	-----	-----	-----

2) INFORMATION FOR SEQ ID NO: 356:

(A) LENGTH: 8

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

xi) SEQUENCE DESCRIPTION: SEQ ID NO: 356;

Arg Arg Ser Val Thr Ser Ser Gln  
1 5

2) INFORMATION FOR SEQ ID NO: 357:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 357:

Asp	Pro	Ser	Lys	Met	Thr	Pro	Leu	Ala	Asp
1				5					10

(2) INFORMATION FOR SEQ ID NO: 358:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 358:

Asp	Thr	Ser	Lys	Met	Met	Leu	Leu	Val	Asp
1				5					10

(2) INFORMATION FOR SEQ ID NO: 359:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 359:

Glu	Pro	Tyr	Glu	Leu	Glu	Asn	Pro	Asn	Gly
1				5					10

(2) INFORMATION FOR SEQ ID NO: 360:

- (i) SEQUENCE CHARACTERISTICS  
(A) LENGTH: 10  
(B) TYPE: amino acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 360:

Glu	Pro	Leu	Glu	Leu	Glu	Thr	Ser	Thr	Arg
1				5					10

0081096 05450